Economic entry-level Mini-Barebone

This Mini-PC Barebone is an offspring of Shuttle's new J series and has been completely redesigned from top to bottom. It combines for the first time the features of various entry-level models to enable the widest possible spectrum of applications. Uncompromising reliability and maximum compatibility are guaranteed by the G41 Express Chipset. SG41J1 Plus V2 supports up to 8 GB of dual channel DDR3 memory and modern Intel Celeron and Core 2 processors with up to four cores. An Intel GMA X4500 graphics processor that supports DirectX-10 is already integrated. In addition to USB and PS/2 ports, the SG41J1 Plus V2 also offers one PCI-Express X16 and one PCI expansion slot.

XPC Barebone
SG41J1 Plus V2
Silver

„Plus V2“ = DDR3 version with VGA and DVI port

Feature Highlights

J1 chassis	• Silver case, 32.5 x 21.5 x 19 cm LWH • Standard storage bays for 1x optical drive and 2x hard disks
Chipset and Graphics	• Intel G41 + ICH7 • Integrated Intel GMA X4500 graphics Shared Memory: max. 1759MB **) • Video outputs: DVI-D and VGA
CPU	• Socket 775, max. 95W TDP • Supports Intel Core 2 Quad/Duo, Pentium & Celeron Dual-Core/4xx • Supports 800, 1066 & 1333 MHz FSB • CPU heatsink not included: Intel-boxed heat sink or ICE Genie3 Heatpipe PM65
Slots	• 1x PCI-Express x16 for graphics cards • 1x PCI (32 Bit)
Memory	• Supports 2x DDR3-800/1066 • Supports up to 2x 4GB
Drive connectors	• 3x Serial-ATA 3 Gb/s • 1x IDE ATA 100
Other connectors	• 5.1-channel HD audio • USB 2.0 (2x front, 4x rear, 2x onboard) • Gigabit LAN
Power supply	• 250 Watt mini power supply
Application	• Basic

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Shuttle Order No: PC-SG41J1P42

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Shuttle XPC Barebone SG41J1 Plus V2 – Special Product Features

The new J-Chassis: a clean and modern look

Shuttle has always placed great emphasis on the interior and exterior aesthetics of the XPC, with the belief that a good blend of style and form factor allows the XPC to be attractive, versatile, and work well in almost any environment - whether the living room, bedroom, or office. With the new J Series, Shuttle retains its trademark appearance and adds a clean, modern look to the front of the XPC. The new J Series will also be the first to bear the new XPC logo, featuring a striking "X" mark to signify the evolution of the XPC product line. At the same time the logo works as a stylish illuminated power button.

Stealth bay for optical drive

The J1's chassis clean facia derives from its engineered optical drive bays, which is hidden from view when not in use — providing superior style and visual appeal.

Small, but easy to install

Shuttle's XPCs offer the power of a desktop PC in a form factor one-third the size while using standard desktop components. Shuttle kept the concept of "future proofing" in mind when it designed the new J Series. The meticulously designed layout features an interior cable management system with pre-installed cables that are routed and tied down at factory to reduce clutter, increase airflow, and ease component installation. Shuttle has developed the ease of installation to an Art of Perfection.

What does Barebone mean?

The Shuttle XPC Barebone SG41J1 Plus V2 consists of a stylish case with pre-installed mainboard, power supply unit (PSU) and cables. Despite its small form factor it offers outstanding connectivity, functionality and performance. For a complete PC system you still need a few components. The XPC is completely customizable, users can pick the processor, memory, storage and expansion options that fit their needs. Sometimes a discrete graphics card is needed.

Supports Dual-Slot Graphics Cards

With a renewed mainboard layout, the SG41J1 Plus V2 is capable of running dual-slot (double-width) PCI Express graphics cards which do not require additional power supply. Please refer to the support list for detailed support information. Note, that the integrated graphics will be disabled, while using a discrete graphics card.

Supports Socket-775 CPU and up to 8 GB DDR3

You can choose from a wide range of Socket 775 Intel processors starting from Celeron up to Quad Core with a maximum TDP wattage of 95W. Also the system memory can be installed according to your needs up to a total size of 8GB DDR3-1066.

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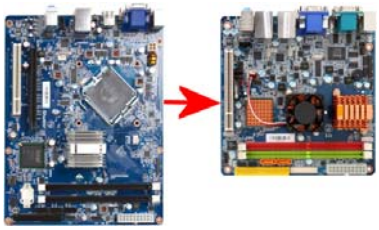
Processor Cooling (not included)

You can either use the heatsink, which comes together with the Intel-boxed processor or the optional available Shuttle ICE Genie3 Heatpipe Cooling System (PM65).

Supports one optical drive and two hard disks

Despite the small housing, users can install one optical drive and up to two hard disks into the SG41J1 Plus V2. But what about heat? Many of the clever design elements of the XPC get little attention. For example, the drive rack built into the SG41J1 Plus V2 leaves space between the hard disks to improve air flow. Intelligently-engineered airflow mechanics channels cool air to where it's needed most - protecting components and providing optimal performance.



Mini-ITX Mainboard Support

Shuttle expands the capabilities of its chassis, adding support for Mini-ITX mainboards (17 x 17cm or 6.7 x 6.7 inches). Now, for the first time, the Shuttle chassis can go beyond the Shuttle mainboard, so you can easily upgrade or downgrade the mainboard to your desire, without any modifications to the chassis.

Gigabit LAN Network

Today's media-rich communications across the Internet and within enterprises are creating new demands towards clients in Local Area Networks. For that reason Shuttle uses the Gigabit LAN performance even in the business and entry-level segment of their XPC line.

Solid Capacitors

The new generation of solid capacitors is used in the temperature sensitive part of the CPU voltage regulator. The lifespan of solid capacitors is in fact up to six times longer than the more common electrolytic capacitors.

Optional: Serial and parallel ports

The optional slot bracket adapter A0041 provides one serial and one parallel port to the back panel. The cable of this adapter is connected to the onboard LPC header and the PCI expansion slot is occupied by the adapter. The adapter can not be used, if a PCI card or a dual-slot graphics card needs to be installed. Many PCs do not have these legacy ports since they have been superseded for most consumer applications, but they are commonly still used in applications such as industrial automation systems, scientific analysis, POS systems and some industrial products.

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Shuttle XPC Barebone SG41J1 Plus V2 Silver Specification

Chassis	J1-type chassis made of steel Storage bays: 1x 13.5 cm (5.25") external, 2x 8.9cm (3.5") internal Dimensions: 32.5 x 21.5 x 19 cm (LWH) = 13.3 liters Weight: 7.0 kg net, 7.5 kg gross 9.2cm rpm-controlled system fan with 4 pin connector Kensington Security Slot at the back panel (also called a K-Slot or Kensington lock) as a part of an anti-theft system
Mainboard	Shuttle FG41 V4.0, Shuttle form factor Proprietary mainboard design for Shuttle XPC Barebone SG41J1 Plus V2 Chipset: Intel G41 Express + ICH7 (TDP: 24W + 3.3W)
BIOS	AMI legacy core SPI interface, 8MB Flash ROM Supports PnP, ACPI 3.0 Supports external USB flash memory card boot up
Power Supply	250 Watt mini power supply unit Input voltage range: 100~240V Connectors: 20-pin ATX, 4-pin ATX12V Active PFC (Power Factor Correction)
Processor Support	Socket 775 Supports Intel Core 2 Quad, Core 2 Duo, Pentium Dual Core, Celeron Dual-Core, Celeron 4xx Supports 800, 1066 or 1333 MHz front side bus (FSB) Maximum power consumption: TDP = 95W max. Processors with 533MHz FSB are not supported. Please refer to the support list for detailed processor support information.
Processor Cooling	Processor cooling is not included Please purchase an Intel boxed processor, which includes an processor cooler. The maximum cooler dimensions are 7.5 x 7.5 x 8 cm The mainboard supports temperature-controlled RPM fan speed by the BIOS. Optional available: Shuttle ICE Genie3 heat-pipe cooling (PM65) system with 92mm fan
Memory Support	2 x 240 pin DIMM memory slots Supports Dual Channel Supports DDR3-800/1066 (PC3-6400/8500) unbuffered SDRAM memory Up to a total size of 8 GB, max. 4 GB per DIMM

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Expansion Slots	1 x PCI-Express x16 v1.0 (for graphics cards only) 1 x PCI (32 Bit) Supports Dual-slot (double-width) PCI Express x16 graphics cards, however, you cannot use the PCI slot in this case. ***) If a discrete graphics card is used, the onboard graphics will be deactivated.
Integrated Graphics	Intel Graphics Media Accelerator X4500 (GMA X4500) Supports Microsoft DirectX 10, Shader Model 4.0 und OpenGL 2.0 Supports Intel Clear Video Technology with ProcAmp color control Maximum DVI resolution: 2048x1536 Max. shared video memory size (UMA): 1759MB**) Dual View: Analog VGA and digital DVI outputs Two video outputs can be used at the same time Supports dual independent display
5.1-channel Audio	Audio Codec: IDT 92HD89C, 5.1 channel Three analog audio connectors (3.5mm) at the Back-Panel: 1) Front Line out (head phone) 2) Rear Surround line-out 3) Center line-out Front panel: microphone input and head phone output
Gigabit-LAN Controller	Marvell 88E8057 Ethernet network controller (Gigabit) Supports 100 / 1.000 MBit/s operation (100Base-TX/1000Base-T) Supports Wake-on-LAN (WOL)
Drive connectors	3x Serial-ATA II, 3 Gbit/s (300 MB/s) bandwidth 1 x IDE ATA 100 drives Pre-installed cables: 1x SATA, 1x IDE
Front panel connectors	Microphone (3,5 mm) Headphone /Line-out (3,5 mm) 2x USB 2.0 (Hi-Speed) Power button Power on LED (blue) Hard disk read/write LED (orange)
Back panel connectors	DVI-D output (24 pin, digital) VGA output (D-Sub, analog) 4x USB 2.0 (Hi-Speed) GigaBit LAN (RJ45) PS/2 keyboard (6-pol. Mini-DIN) PS/2 mouse (6-pol. Mini-DIN) Audio Line in, Line out, Microphone (shared with 6-ch line out) Clear CMOS button Optional: Serial and parallel port ***)

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Other connectors	2x fan connectors for system and CPU fan (two 4 pin header) 2x USB 2.0 (2x5 pin header) LPC port ***) Audio Aux-in
Accessories	XPC Multilanguage Quick User Guide XPC Driver CDROM (Windows XP, Vista 32 / 64 bit and Win7 32/ 64 bit) Power cord Pre-installed cables: 1x IDE, 1x SATA 4 pin Molex to SATA power cable Screws
Conformity Certification	EMI: FCC, CE, BSMI Safety: CB, BSMI Others: RoHS, Eup Lot6

***) Overclocking Warning**
Please note there is a certain risk involved with overclocking, including adjusting the setting in the BIOS or using third-party overclocking tools. Overclocking may affect your system stability or even cause damage of the components and devices of your system. It is done at your own risk and expense. Shuttle cannot be held responsible for possible damage caused by overclocking.
****) Shared Memory Size**
The shared memory size is dynamically controlled by VGA driver, and the Max. shared memory size will be available only when 4GB or more memory is installed under 64-bit OS.
*****) Optional slot bracket adapter for serial and parallel ports (A0041)**
The optional accessory A0041 is a slot bracket adapter which can be used to provide one serial and one parallel port at the back panel. The cable of this adapter will be connected to the onboard LPC port and one expansion slot (PCI or PCI Express) will be occupied by the adapter.

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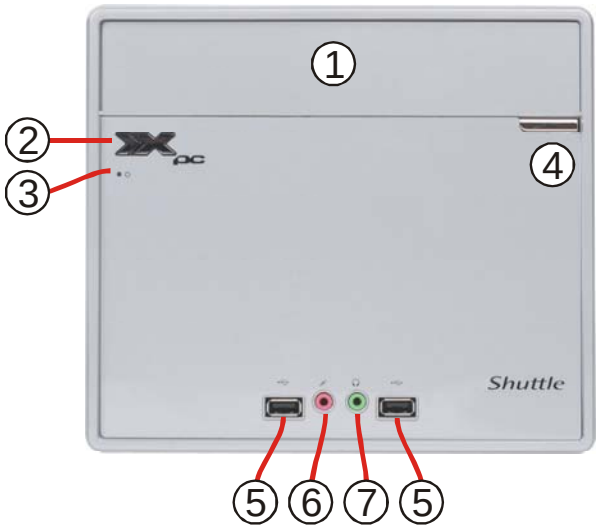
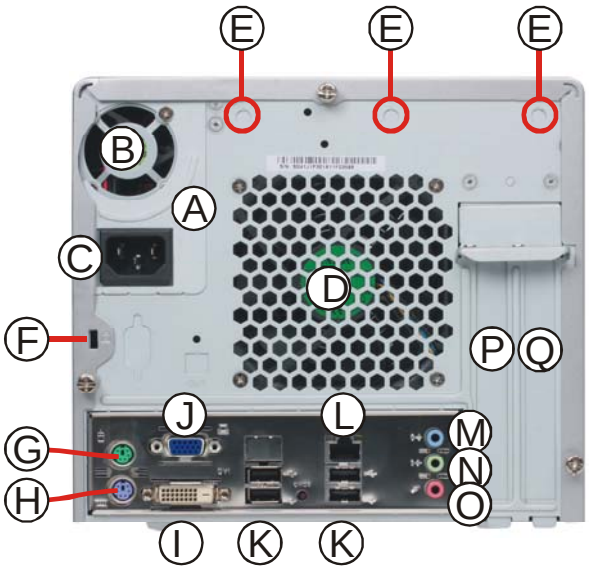
Shuttle XPC Barebone SG41J1 Plus V2 Silver – Connectors

Front View



Rear View

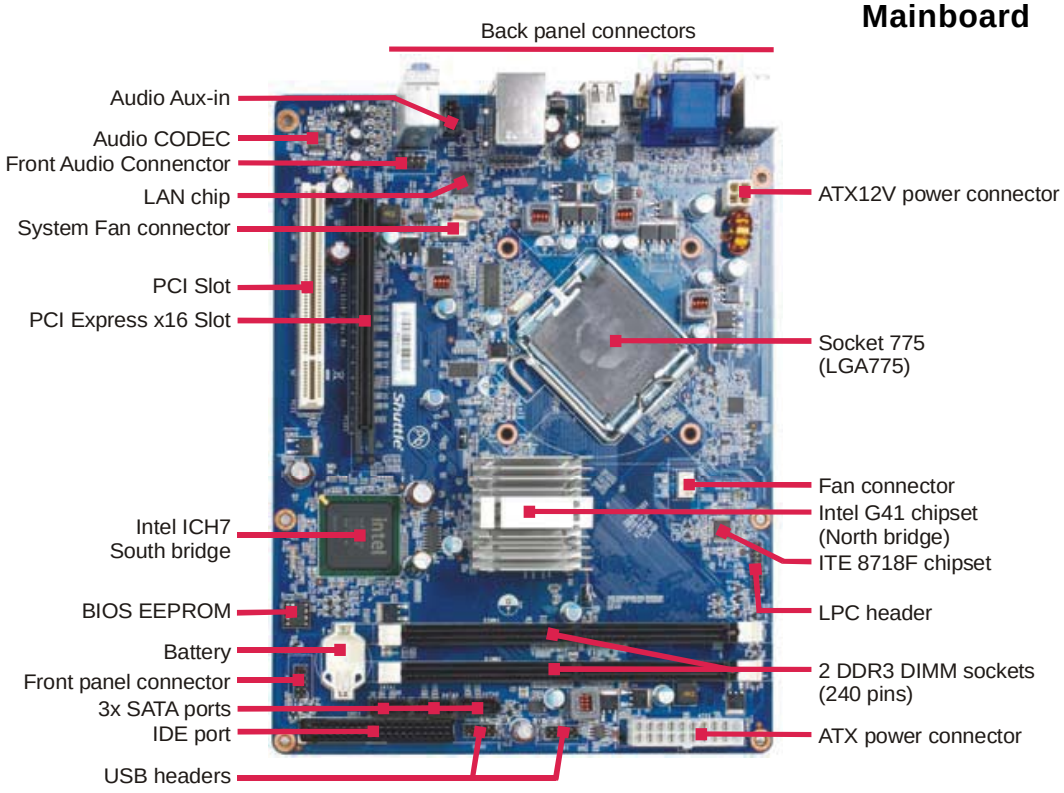


(1) 5.25" bay
(2) Power button
(3) Power LED
(4) DVD Eject button
(5) 2x USB ports
(6) Microphone input
(7) Headphone output

(A) Power supply consist of
(B) PSU cooling fan and
(C) AC power connector
(D) Chassis cooling fan
(E) Wireless LAN perforation
(F) Hole for Kensington-Lock
(G) PS/2 mouse port
(H) PS/2 keyboard port

(I) DVI-D video port (digital)
(J) VGA video port (analog)
(K) 4x USB ports
(L) RJ45 LAN port
(M) Audio Line-in port
(N) Audio Line-out port
(O) Microphone-in port
(P) PCI-Express X16 slot
(Q) PCI slot

Mainboard



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